WHAT IS CLAIMED IS:

1. A detector for simultaneously detecting and identifying subtypes of human papilloma viruses (HPV) contained in a sample, comprising:

    a carrier having a first part and a second part for carrying said sample thereon;

    a first oligonucleotide carried on said first part of said carrier; and

    a second oligonucleotide carried on said second part of said carrier,

    wherein said first and second oligonucleotides respectively hybridized with deoxyribonucleic acids contained in a first subtype of human papilloma virus and a second subtype of human papilloma virus for simultaneously detecting and identifying subtypes of human papilloma viruses.

2. The detector according to claim 1, wherein said carrier is made of nylon.

3. The detector according to claim 1, wherein said carrier is a glass plate.

4. The detector according to claim 1, wherein said first and second subtypes of human papilloma viruses are respectively selected from one of following viruses:

HPV 11 NC 001525

Sequence No.	5'→ 3'	Locus in HPV 11
M1101	ATCTGTGTCTAAATC	6799 –6813
M1102	TCTGTGTCTAAATCTGCTAC	6800 – 6819
M1103	ATCTGTGTCTAAATCTGCTACATACA	6799 – 6824
M1104	TGCATCTGTGTCTAAATCTG	6796 – 6815
M1105	AAATCTGCTACATACACTAA	6809 – 6828
M1106	CTAAATCTGCTACATACACTA	6807 – 6827
M1107	CTACATACACTAATTCAGAT	6816 – 6835
M1108	TAGCATTACATTATCTGCAGAAG	6895 – 6917
M1109	TCCTTCTGTTTTGGAGGAC	6943 – 6961
M1110	TTTATCGCCTCCACCAAATGGTACAC	6973 – 6998

M1111	TTATAGATATGTACAGTCACAGGCC	7009 – 7033
M1112	ACCCACACCTGAAAAAGAAAAAC	7048 – 7070
M1113	GGCGGATGCTCATTATGCGACTG	1044 - 1066
M1114	ATATGTAAGTCCTATAAGCAATGTAG	1101 - 1126
M1115	CTAATGCAGTAGAAAGTGAGATAAGT	1127 - 1152
M1116	CACGGTTAGACGCCATTAAACTTACA	1154 - 1179
M1117	CACAGCCAAAAAAGGTAAAGCGACGG	1181 - 1206
M1118	GCAACGCAGGTAGAGAAACATGGCGA	1264 - 1289
M1119	GAAAATGGGGGAGATGGTCAGGAAAGGG AC	1294 - 1323
M1120	GACACAGGGAGGGACATAGAGGGTGA	1321 - 1346
M1121	ACATAGAGAGGCGGAAGCAGTAGACG	1356 - 1381
M1122	ACAGCACCCGAGAGCATGCAGACACA	1382 - 1407
M1123	TCAGGAATATTAGAATTACTAAAATG	1408 - 1433
M1124	GCTGTCATTTGTTGATTTA	1482 - 1500

HPV 16 NC 001526

Sequence No.	5'→ 3'	Locus in HPV 16
M1601	TATGTCATTATGTGCTGCCA	6659 – 6678
M1602	GTGCTGCCATATCTACTTCA	6670 – 6689
M1603	TGCCATATCTACTTC	6674 – 6688
M1604	TATCTACTTCAGAAACTACA	6679 – 6698
M1605	CTACTTCAGAAACTACATATAA	6682 – 6703
M1606	ATAAAAATACTAACTTTAAG	6700 – 6719
M1607	CAAAATAACCTTAACTGCAGACG	6773 – 6795
M1608	TTCCACTATTTTGGAGGAC	6821 – 6839
M1609	TCTACAACCTCCCCCAGGAGGCACAC	6851 – 6876
M1610	TTATAGGTTTGTAACCCAG	6887 – 6905
M1611	ACATACACCTCCAGCACCT	6923 – 6941
M1612	CCTTAAAAAATACACT	6956 – 6971
M1613	AGCAAAACAACATAGAGATGCAG	1089 - 1111
M1614	ACTTAGTGATATTAGTGGATGTGTAG	1145 - 1170
M1615	TAGTCCTAGATTAAAAGCTATATGTATAG A	1181 - 1210
M1616	GAAAAACAAAGTAGAGCTGCAAAAAG	1209 - 1234
M1617	CTCAGCAGATGTTACAGGTAGAAGGG	1285 - 1310
M1618	CCATGAGACTGAAACACCATGTAGTC	1313 - 1338
M1619	GGGGGTGGTTGCAGTCAGTACAGTAG	1356 - 1381
M1620	GTGGGGGAGAGGGTGTTAGTGAAAGA	1387 - 1412

M1621 CTATATGCCAAACACCACTTACAAAT   1417 - 1442
M1622 GTTATACGGGGTGAGTTTTTCAGAAT   1502 - 1527

HPV 18 NC 001357

Sequence No.	5' → 3'	Locus in HPV 18
M1801	TTCTACACAGTCTCC	6650 – 6664
M1802	CAGTCTCCTGTACCTGGGCA	6657 – 6676
M1803	AGTCTCCTGTACCTGGGCAA	6658 – 6677
M1804	TCTCCTGTACCTGGGCAATATGA	6660 – 6682
M1805	CTGTACCTGGGCAATATGAT	6664 – 6683
M1806	ATGATGCTACCAAATTTAAG	6679 – 6698
M1807	TACTATTACTTTAACTGCAGATG	6752 – 6774
M1808	TAGCAGTATTTTAGAGGAT	6800 – 6818
M1809	TGTTCCCCCCCCCCCAACTACTAGTT	6830 – 6855
M1810	ATATCGTTTTGTACAATCTGTT	6866 – 6887
M1811	GGATGCTGCACCGGCTGAA	6905 – 6923
M1812	CTATGATAAGTTAAAG	6935 – 6950
M1813	GGTCCACAATGATGCACAAGTGT	1135 - 1157
M1814	CACAGAAACAGTCCATTAGGGGAGC	1192 - 1217
M1815	GCTGGAGGTGGATACAGAGTTAAGTC	1219 - 1244
M1816	AGTGGGCAGAAAAGGCAAAAAGGCGG CTG	1271 - 1300
M1817	CACAGATTCAGGTAACTACAAATGGC	1347 - 1372
M1818	CAATGTATGTAGTGGCGGCAGTACGG	1384 - 1409
M1819	GACAACGGGGGGCACAGAGGGCAACAA	1418 - 1443
M1820	GTAGACGGTACAAGTGACAATAGCAA	1451 - 1476
M1821	CCACAATGTACCATAGCACAATTAAA	1493 - 1518
M1822	CACATATGGGCTATCATTTACAGATT	1573 - 1598

HPV 26 NC 001583

Sequence No.	5' → 3'	Locus in HPV 26
M2601	TAGTACATTATCTGCAGCAT	6619 – 6638
M2602	ATTATCTGCAGCATC	6625 – 6639
M2603	TGCAGCATCTGCATCCACTC	6631 – 6650
M2604	GCATCTGCATCCACTCCATTTAAA	6635 – 6658
M2605	CTCCATTTAAACCATCTGAT	6648 – 6667
M2606	TAAAATAACACTTACAACAGATG	6727 – 6749
M2607	TGCCTCCATATTGGAGGAT	6775 – 6793

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M2608	ACTAACCTTACCTCCCACTGCTAGTT	6805 – 6830
M2609	CTATAGGTTTATTAAAAACTCT	6841 – 6862
M2610	TAACGCCCCTCCTGTGCCA	6880 – 6898
M2611	AAAACAGGCAAATACAAAGGCAG	1093 - 1115
M2612	CTAGGTAGTCAGAACAGCCCGTTGCA	1139 - 1164
M2613	GCGACAGTCAGCAGAATACACACCAAGTA A	1194 - 1223
M2614	CAAAAGGAGAGCCGTGGACAGTGTAC	1237 - 1262
M2615	CCGTACAGGTAGATAAACAATATGAA	1305 - 1330
M2616	GCCTAGTGTGTGTAGTCAGGGGGGG	1345 - 1369
M2617	GCCTCAGTGGAAGATATCGATGTAGA	1376 - 1401
M2618	CAGTGTTACACAAATATGTGAATTAT	1414 - 1439
M2619	CAGTATATGGTGTAAGTTTTGCAGAA	1485 - 1510

HPV 31 NC 001527

Sequence No.	5'→ 3'	Locus in HPV 31
M3101	TGCAATTGCAAACAG	6592 – 6606
M3102	GCAATTGCAAACAGTGATAC	6593 – 6612
M3103	CAATTGCAAACAGTGATACT	6594 – 6613
M3104	GCAAACAGTGATACTACATTTAA	6599 – 6621
M3105	CTACATTTAAAAGTAGTAAT	6612 – 6631
M3106	CAAAATAACATTATCTGCAGACA	6691 – 6713
M3107	TCCTGCTATTTTGGAAGAT	6739 – 6757
M3108	ATTGACCACACCTCCCTCAGGTTCTT	6769 – 6794
M3109	CTATAGGTTTGTCACCTCACAG	6805 – 6826
M3110	AACTGCCCCCCAAAAGCCC	6844 – 6862
M3111	AGCGGAGGAACATGCAGAGGCTG	1083 - 1105
M3112	TTTAAGTGATATTAGTAGTTGTGTGG	1140 - 1165
M3113	AGTCCACGGTTAAAAGCTATATGCATAGA A	1177 - 1206
M3114	GACTCTTTGAACTTCCAGACAGCGGG	1232 - 1257
M3115	GCAGCAGATGGTACAGGTAGAGGAGC	1281 - 1306
M3116	AATGGTAGTGACGGGACACATAGTGA	1327 - 1352
M3117	CCAACACGTAATATATTGCAAGTGTT	1369 - 1394
M3118	GCAATGGTAAAGCTGCTATGTTAGGT	1403 - 1428
M3119	TTATATGGTGTAAGTTTTATGGAAC	1441 - 1465

HPV 32 NC 001586

Sequence No.	5'→ 3'	Locus in HPV 32
M3201	TGCTACTGTAACAACTGAAG	6906 – 6925
M3202	GCTACTGTAACAACTGAAGA	6907 – 6926
M3203	TACTGTAACAACTGA	6909 – 6923
M3204	ACTGTAACAACTGAAGACAC	6910 – 6929
M3205	CAACTGAAGACACATACAAGTC	6917 – 6938
M3206	CAAAATTACATTATCTGTAGAGG	7005 – 7027
M3207	TCCTGACATACTAGACGAT	7053 – 7071
M3208	TGTAGCTCCACCGCCCTCTGGTACTT	7083 – 7108
M3209	TTATAGATTTGTGCAGTCTCAG	7119 –7140
M3210	TAAGGTAACAGCACCTGAA	7158 – 7176
M3211	TTTTTCTGACTATTCA	7188 – 7203
M3212	AGCACATGCAGATAAGGAGGCAG	1062 - 1084
M3213	GGCAGTCCATATGAAAGTCCCGCCAGTGAT	1111 - 1140
M3214	GAGCTAAGCCCTAGGCTTGGTGGATT	1162 - 1187
M3215	GGGGCCAAACGACGACTATTTCAATC	1210 - 1235
M3216	GCAGGAACAGGTAGAAAATGGACATG	1284 - 1309
M3217	GTGTACATGGGGTGCAGGAAAATCAG	1352 - 1377
M3218	GCCTACAACAAGGGTGGTGGAATTGC	1395 - 1420
M3219	GCAAGCAACATTGTTAGGTAAGTTTA	1437 - 1462
M3220	GCTGTTTGGATTGTCATTTGGTGATT	1467 - 1492

HPV 33 NC 001528

Sequence No.	5'→ 3'	Locus in HPV 33
M3301	TATGCACACAAGTAACTAGT	6624 – 6643
M3302	CACACAAGTAACTAG	6628 – 6642
M3303	ACAAGTAACTAGTGACAGTA	6631 – 6650
M3304	GTAACTAGTGACAGTACATATAA	6635 – 6657
M3305	GTACATATAAAAATGAAAAT	6648 – 6667
M3306	CAAAGTTACCTTAACTGCAGAAG	6727 – 6749
M3307	TCCAGATATTTTAGAAGAT	6775 – 6793
M3308	TTTAACACCTCCTCCATCTGCTAGTT	6805 – 6830
M3309	CTATAGGTTTGTTACCTCTCAG	6841 – 6862
M3311	AACAGTACCTCCAAAGGAA	6880 – 6898

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M3312	CTTAGGTAAATATACA	6910 – 6925
M3313	AGGGGAGGATGATTTAAATGCTG	1100 - 1122
M3314	GCATGTTCACAAAGTGCTGCGGAGGA	1149 - 1174
M3315	GATCGTGCTGCAAACCCGTGTAGAAC	1182 - 1207
M3316	GAATGCACATACAGAAAACGAAAAATAGAT	1227 - 1256
M3317	AAATAGATGAGCTAGAAGACAGCGGA	1249 - 1274
M3318	GGTACAACAGGTAGAAAGTCAAAATG	1307 - 1332
M3319	GACTTAGAATCTAGTGGGGTGGGGGA	1350 - 1357
M3320	CTGTGAGACAAATGTAGATAGCTGTG	1391 - 1416
M3321	CGTTGCAGGAAATTAGTAATGTTCTA	1426 - 1451
M3322	GAGGCCTATGGAATAAGTTTTAT	1494 - 1516

HPV 35 NC 001529

Sequence No.	5' → 3'	Locus in HPV 35
M3501	TCTGCTGTGTCTTCTAGTGA	6612 – 6631
M3502	TGCTGTGTCTTCTAG	6614 – 6628
M3503	GTGTCTTCTAGTGACAGTAC	6618 – 6637
M3504	CTTCTAGTGACAGTACATATAAA	6622 – 6644
M3505	GTACATATAAAAATGACAAT	6634 – 6653
M3506	TAAAATAACACTAACAGCAGATG	6713 – 6735
M3507	CCCGTCCATTTTAGAGGAT	6761 – 6779
M3508	CCTTACACCACCGCCTTCTGGTACCT	6791 – 6816
M3509	ATATCGCTATGTAACATCACAG	6827 – 6848
M3510	ACCCAGTGCACCAAAACCT	6866 – 6884
M3511	GGAGCAAACACACAAAGAGGCTG	1089 - 1111
M3512	GCAGCGTGAGCTTATGTGTTAATAATAACA	1151 - 1180
M3513	GTCCACGTTTAAAAGCTATTTGCA	1184 - 1207
M3514	CGATTATTTGAACTACCAGACAGCGG	1237 - 1262
M3515	GAGATACAACAGGTAGAGGGGCATGA	1291 - 1316
M3516	GGGCAGTGGGGATAGTATAACCTCTA	1338 - 1363
M3517	GACATGATGAGACTCCAACGCGAGAC	1376 - 1401
M3518	CTAAAATGTAGTAATGCAAACGCAGC	1414 - 1439
M3519	GCTATGTTGGCTAAATTTAAAGAACT	1438 - 1463

HPV 37 NC 001687

Sequence No.	5' → 3'	Locus in HPV 37

M3701	TGTCTACTGACAATG	6782 – 6796
M3702	TGTCTACTGACAATGGCGAA	6782 – 6801
M3703	TGACAATGGCGAAGTTACAG	6789 – 6808
M3704	GACAATGGCGAAGTTACAGA	6790 – 6809
M3705	AATGGCGAAGTTACAGAATA	6793 – 6812
M3706	CAGAATATAATTCTCAAACA	6806 – 6825
M3707	TAAAGTTCCTTTAAAGGCTGAGG	6885 – 6907
M3708	TTCTGGTATATTGGAAGAG	6933 – 6951
M3709	ATTTGTACCTACTCCAGATAATTCAG	6963 – 6988
M3710	TTATAGGTACATTAATTCAAAG	6999 – 7020
M3711	TGCAGTTGTTGAAAAAGAA	7038 – 7056
M3712	CTTTGCAAAATATACA	7068 – 7083

HPV 39 NC 001535

Sequence No.	5' → 3'	Locus in HPV 39
M3901	CTCTATAGAGTCTTC	6677 – 6691
M3902	TAGAGTCTTCCATACCTTCT	6682 – 6701
M3903	ATAGAGTCTTCCATACCTTC	6681 – 6700
M3904	GTCTTCCATACCTTCTACATATG	6686 – 6708
M3905	CTACATATGATCCTTCTAAG	6700 – 6719
M3906	TACTGTCACATTAACAACTGATG	6779 – 6801
M3907	TTCCTCTATATTGGACAA	6827 – 6844
M3908	TGTAGCTCCTCCAGCATCTGCCAGTT	6857 – 6882
M3909	TTACAGATACCTACAGTCTGCA	6893 – 6914
M3910	GGATGCTCCAGCACCTGAA	6932 – 6950
M3911	ATATGACGGTCTAAAG	6962 – 6977
M3912	GGCCCAAAGGGATGCACAAGCAG	1149 – 1171
M3913	CAGACAGCAGTGGCGACACTAGACCGTATG	1196 – 1225
M3914	GTAGGCAGGAATACCAGGGGAACAC	1234 – 1258
M3915	GCAGTACGCAGGCAACACAAACGGTG	1283 – 1308
M3916	GGAGGAGGTAACTGTAGCAACTAATA	1362 – 1387
M3917	CATGGCGGCAGTGTACGGGAGGAGTG	1411 – 1436
M3918	GGATAGTGCTATAGATAGTGAAAACC	1446 – 1471
M3919	CTCCAACTGCACAAATTAAATTATTG	1484 – 1509
M3920	CCAATAACAAAAAGGCTGCAATGCTA	1517 – 1542

HPV 42 NC 001534

| Sequence | 5' → 3' | Locus in |

No.		HPV 42
M4201	TATATGTTGGGGAAATCAGCTA	6802 - 6823
M4202	CACTGCAACATCTGGTGATA	6874 - 6893
M4203	GCAACATCTGGTGATACATATACAGCTGCT	6878 - 6907
M4204	CATTAACTGTTGAAGTTATGTCA	6978 - 7000
M4205	CCTAACATATTAGAGGAGTGGAATGT	7019 - 7044
M4206	CACCACCACCTTCAGGAACT	7053 - 7072
M4207	GTTATAGGTATGTACAATCAGAAG	7083 - 7106
M4208	GCTAAGGTAACAACGCCAGAAAAAAGGAT	7121 - 7150
M4209	CAGACTTTTGGTTTTGGGAGGTAA	7158 - 7181
M4210	GAAAAGTTTTCTACTGATTTA	7190 - 7210
M4211	GTCAGTGATTCACAGCACAGCATAG	1111 – 1135
M4212	GTCCTAGGCTTGGCGGTTTAA	1148 - 1168
M4213	CCCAAGGGGCCAAACGACGATTATTCCAGT	1184 - 1213
M4214	CAGCAGACACAGGTAGAACACGGACA	1261 - 1286
M4215	GCAGTGGGTAGTGAACTTGGGG	1321 - 1342
M4216	GAAGAAGGTAGTACTACAAGTACGCC	1354 – 1379
M4217	GGTAGAATTACTTAAGTGTAAGAAC	1392 - 1416
M4218	GTTAGGTAAGTTTAAAGAATTG	1431 - 1452
M4219	GTCATTTGGCGATTTAGTAAGA	1461 - 1482

HPV 43 U12504

Sequence No.	5'→ 3'	Locus in HPV 43
M4301	CATTTGTTTTGGGAATCAGTTG	21 - 42
M4302	TGACCCTACTGTGCCCAGTA	99 - 118
M4303	ACTGTGCCCAGTACATATGACAATGCAAAG	106 - 135
M4304	GTTTATATTTCAATTATGCATAA	177 - 199
M4305	CCAGAGGTTATGACATATATT	211 – 231
M4306	CCCACATTATTAGAGGACTGGAA	244 - 266
M4307	CCACCTGCCTCTGCTTCTTTG	280 - 300
M4308	CGCTTTTTGTCTAACAAGGCCATTG	313 – 337
M4309	CCAAAGGAACGGGAGGATCCCTA	358 - 380
M4310	CTTACAGAAAAGTTTTCTGCACAAC	409 - 433

HPV 44 NC 001689

Sequence No.	5'→ 3'	Locus in HPV 40
M4401	TGCCACTACACAGTC	6719 – 6733
M4402	CTACACAGTCCCCTCCGTCT	6724 – 6743
M4403	TGCCACTACACAGTCCCCTC	6719 – 6738
M4404	CAGTCCCCTCCGTCTACATATA	6729 – 6750
M4405	CTACATATACTAGTGAACAA	6742 – 6761
M4406	TAGTATTACCTTAACGGCGGAGG	6821 – 6843
M4407	TGCTGGTATTTTAGAACAG	6869 – 6887
M4408	GTTGTCGCCGCCCCCAAATGGTACCT	6899 – 6924
M4409	ATACAGATATGTGCAGTCCCAG	6935 – 6956
M4410	GCCACCCCCTGAAAAGGCA	6974 – 6992
M4411	CTATGCAAAATTAAGT	7004 – 7019
M4412	GGCGGATGCTCATTATGCGGCTG	1038 – 1060
M4413	GGTAGTCCATATGTTAGTCCTTTAAGTAAT	1087 – 1116
M4414	CACGGCTGGACGCTATAACATTAAGT	1148 – 1173
M4415	GACGGCTGTTTGACAGACCAGAATTA	1196 – 1221
M4416	GCTGAAACGCAGGTAGAGAAATGG	1255 – 1280
M4417	GGGAGGTGGACAAGGAAGGGACACAG	1299 – 1324
M4418	GGAAGTGCAGACACATAGCAACACAC	1347 – 1372
M4419	GGTACTAGAACTATTGAAATGTAAGA	1395 – 1420
M4420	GCTTGGTAAGTTTAAGGATTGCTATG	1437 – 1462

HPV 45 NC 001590

Sequence No.	5'→ 3'	Locus in HPV 45
M4501	TGCCTCTACACAAAATCCTG	6651 – 6670
M4502	CTCTACACAAAATCC	6654 – 6668
M4503	ACAAAATCCTGTGCCAAGTA	6660 – 6679
M4504	CAAAATCCTGTGCCAAGTAC	6661 – 6680
M4505	AATCCTGTGCCAAGTACATATG	6664 – 6685
M4506	GTACATATGACCCTACTAAG	6677 – 6696
M4507	CACTATTACTTTAACTGCAGAGG	6756 – 6778
M4508	TAGTAGTATATTAGAAAAT	6804 – 6822
M4509	TGTCCCTCCACCACCTACTACAAGTT	6834 – 6859
M4510	ATATCGTTTTGTGCAATCAGTT	6870 – 6891
M4511	GGATACTACACCTCCAGAA	6909 – 6927
M4512	AGTTCAGAATGATGCACAGGTGT	1135 – 1157
M4513	GCAGCTAAGTGTGGATACGGATCTAAGT	1216 – 1245

CC

M4514	CAAGAAATTTCATTAAATAGTGGGCA	1253 – 1278
M4515	ACGGTTGTTTACAATATCAGATAGTG	1294 – 1319
M4516	CATAGTACACAAGTAGTGGTGGGGA	1397 – 1422
M4517	GACAATGCAGAAAATGTAGATCCGCA	1430 – 1455
M4518	GGAGCTATTACAAGCAAGTAACAAAA	1477 – 1502
M4519	GCAATGCTGGCAGTATTTAAAGACA	1508 – 1532
M4520	ATATGGGCTGTCATTTACGGATTTGG	1534 – 1559

HPV 51 NC 001533

Sequence No.	5'→ 3'	Locus in HPV 51
M5101	CACTGCCACTGCTGCGGTTT	6555 – 6574
M5102	TGCCACTGCTGCGGT	6558 – 6572
M5103	CACTGCTGCGGTTTCCCCAA	6561 – 6580
M5104	CCACTGCTGCGGTTTCCCCA	6560 – 6579
M5105	CTGCGGTTTCCCCAACATTTAC	6566 – 6587
M5106	CAACATTTACTCCAAGTAAC	6578 – 6597
M5107	TAAAATTACTTTAACTACAGAGG	6657 – 6679
M5108	TCCTACCATTCTTGAACAG	6705 – 6723
M5109	ATTAACATTACCTCCGTCTGCTAGTT	6735 – 6760
M5110	ATATAGGTTTGTTAGAAATGCA	6771 – 6792
M5111	GGACACCCCTCCACAGGCT	6810 – 6828
M5112	TTTGGCCAAATATAAA	6840 – 6855
M5113	ATTACAGGCAAACAAAGAGGCTG	1092 – 1114
M5114	GCGAAGCAGCCCATTAGGAGACATTACA AA	1149 – 1178
M5115	CCATAGTCAGGCAAACGAGTCACAAG	1197 – 1222
M5116	AGATTACTGGACAGTTATCCGGACA	1231 – 1255
M5117	CAGGTAGATGGGCAACATGGCGGTTC	1300 – 1325
M5118	AGCTGTGCAAATGTAGAACTAAACAG	1384 – 1409
M5119	GGTATTAGTTATAATGAGTTGGTACG	1477 – 1502

HPV 52 NC 001592

Sequence No.	5'→ 3'	Locus in HPV 52
M5201	TGAGGTTAAAAAGGA	6695 – 6709
M5202	TGAGGTTAAAAAGGAAAGCA	6695 – 6714
M5203	GAGGTTAAAAAGGAAAGCAC	6696 – 6715
M5204	TTAAAAAGGAAAGCACATAT	6700 – 6719

M5205	AAAGGAAAGCACATATAAAAAT	6704 – 6725
M5206	GCACATATAAAAATGAAAAT	6712 – 6731
M5207	CAAAATTACATTAACAGCTGATG	6791 – 6813
M5208	TGCCACTATTTTAGAGGAC	6839 – 6857
M5209	CCTTACCCCACCACCGTCTGCATCTT	6869 – 6894
M5210	ATACAGATTTGTCACTTCTACT	6905 – 6926
M5211	AAACACACCACCTAAAGGA	6944 – 6962
M5212	TTTAAAGGACTATATG	6974 – 6989
M5213	AGGGGAGGATGATTTACATGCTG	1085 – 1107
M5214	GCAGTCCGGAAAGTGCTGGGCAAGATGG TG	1135 – 1164
M5215	GGTAGTCCGCGTGCAAAACACATTTG	1176 – 1201
M5216	CCAAAACGCAAACCATGTCACGTAGA	1224 – 1249
M5217	CAAAATGGCGACTGGCAAAGTA	1311 – 1332
M5218	GCTAGTAATTCAGATGTAAGTTGTAC	1359 – 1384
M5219	GAGGAAAATAGTAATAGAACGCTAAA	1401 – 1426
M5220	GCGAAAATAGCATAAAAACAACTGTA	1447 – 1472
M5221	AGAAACATATGGTGTTAGCTTTATGG	1487 – 1512

HPV 53 NC 001593

Sequence No.	5' → 3'	Locus in HPV 53
M5301	TCCGCAACCACACAGTCTAT	6681 – 6700
M5302	CCGCAACCACACAGT	6682 – 6696
M5303	CCGCAACCACACAGTCTATG	6682 – 6701
M5304	CACAGTCTATGTCTACATATAA	6691 – 6712
M5305	CTACATATAATTCAAAGCAA	6703 – 6722
M5306	TAAAATATCCCTGTCTGCTGAGG	6782 – 6804
M5307	TTCTACCTTACTGGAAGAC	6830 – 6848
M5308	TTTGTCGCCTCCTGTTGCCACTAGCT	6860 – 6885
M5309	ATACAGATATGTGAAAAGTGCA	6896 – 6917
M5310	GGATCAGCCCCCTCCTGAA	6935 - 6953

HPV 54 NC 001676

Sequence No.	5' → 3'	Locus in HPV 54
M5401	TACAGCATCCACGCA	6633 – 6647
M5402	CAGCATCCACGCAGGATAGC	6635 – 6654
M5403	ACGCAGGATAGCTTTAATAA	6643 – 6662
M5404	CACGCAGGATAGCTTTAATA	6642 – 6661

M5405	ATAGCTTTAATAATTCTGAC	6650 – 6669
M5406	TACCATAACCCTTACAGCAGATG	6729 – 6751
M5407	TCCCACTATTCTAGAGGAC	6777 – 6795
M5408	TATAACCCCCCCAGCTACAAGTAGTT	6807 – 6832
M5409	ATATAGGTTTGTACAGTCACAG	6843 – 6864
M5410	GAATAATGCCCCTGCAAAGGAA	6882 – 6903
M5411	GCTGCAGGCAGATGTAGAGGCAG	1043 – 1065
M5412	CGTATGTAAGTCCTGTTGCAAACAGCGA AC	1099 – 1128
M5413	CTGTGTAGAAAAGGACCTAA	1130 – 1149
M5414	TATATCCCTAGGACGGCGGTCAGCCA	1166- 1191
M5415	GGTAAATACCGAGGGGACAGATGAAA	1265 – 1290
M5416	GAAACAACTACAGATAGCCTAGGAAG	1323 – 1348
M5417	CGTGTAGCATTGTTTGGTATGTTTAA	1386 – 1411
M5418	TATGGATTAAGTTTTATGGACC	1419 – 1440

HPV 56 NC 001594

Sequence No.	5' → 3'	Locus in HPV 56
M5601	CTGCTACAGAACAGT	6630 – 6644
M5602	GCTACAGAACAGTTAAGTAA	6632 – 6651
M5603	CAGAACAGTTAAGTAAATAT	6636 – 6655
M5604	GAACAGTTAAGTAAATATGATGC	6638 – 6660
M5605	GTAAATATGATGCACGAAAA	6648 – 6667
M5606	CAAAATTACTTTGTCTGCAGAGG	6727 – 6749
M5607	TGCTAACCTACTGGAGGAC	6775 – 6793
M5608	GTTATCCCCGCCAGTGGCCACCAGCC	6805 – 5830
M5609	ATATAGATATGTTAGAAGCACA	6841 – 6862
M5610	GGAACAGCCACCAACAGAA	6880 – 6898

HPV 58 NC 001443

Sequence No.	5' → 3'	Locus in HPV 58
M5801	ATGCACTGAAGTAACTAAGG	6674 – 6693
M5802	CACTGAAGTAACTAAGGAAG	6677 – 6696
M5803	TGAAGTAACTAAGGA	6680 – 6694
M5804	GAAGTAACTAAGGAAGGTAC	6681 – 6700
M5805	CTAAGGAAGGTACATATAAAAA	6688 – 6709
M5806	ATAAAAATGATAATTTTAAG	6703 – 6722
M5807	CAAAATTACACTAACTGCAGAGA	6776 – 6798

M5808	TTCCAATATTTTGGAGGAC	6824 – 6842
M5809	TTTAACACCTCCTCCGTCTGCCAGTT	6854 – 6879
M5810	ATATAGATTTGTTACCTCCCAG	6890 – 6911
M5811	AACAGCACCCCCTAAAGAA	6929 – 6947
M5812	AGGGGTGGACGATATAAATGCTG	1104 – 1126
M5813	GCATGCTCAGAAAGTGCTGTAGA	1153 – 1175
M5814	GCAAATGTGTGTGTATCGTGGAAATATA AA	1195 – 1224
M5815	AAATTATTGAGCTAGAAGACAG	1253 – 1274
M5816	GCACACCAGGTAGAAAGCCAA	1312 – 1332
M5817	GGCTAGTTCAGATGTAAGCAGTGAAA	1377 – 1402
M5818	GTAATATTCTACATAACAGTAA	1445 – 1466
M5819	GCAACGCTATTATATAAATTC	1474 – 1494
M5820	GCTTATGGAGTAAGTTTTATGGAA	1501 – 1524

HPV 59 NC 001635

Sequence No.	5'→ 3'	Locus in HPV 59
M5901	TTCTACTACTTCTTC	6643 – 6657
M5902	ACTACTTCTTCTATTCCTAA	6647 – 6666
M5903	ACTTCTTCTATTCCTAATGT	6650 – 6669
M5904	TCTTCTATTCCTAATGTATACAC	6653 – 6675
M5905	ATGTATACACACCTACCAGT	6666 – 6685
M5906	TAAAATAACATTAACTACAGAGG	6745 – 6767
M5907	TACCACTATTTTGGAGGAT	6793 – 6811
M5908	TGTTACACCACCTCCTACTGCTAGTT	6823 – 6848
M5909	ATACCGTTTTGTTCAATCTGCT	6859 – 6880
M5910	GGACACCGCACCGCCAGTT	6898 – 6916
M5911	TTATGACAAACTAAAG	6928 - 6943
M5912	AGCCCAAAGGGATGCACGGGAAA	1093 – 1115
M5913	GCAGTATAGAAAACAGTAGTGAGAAAGC GG	1143 – 1172
M5914	CCATTACAAGAAATATCAGTAAATG	1196 – 1220
M5915	GGTTAATAACAGTGCCAGACAGCG	1245 – 1268
M5916	GGTAACCGTGGAGAATACTGGAAATG	1306 – 1331
M5917	CTGTAGCGACAGCAGTAACATGGATG	1372 – 1397
M5918	CCCACTAATCAATTGTTACAGTTA	1421 – 1444
M5919	GGGTTATCATTTCAAGATTTGG	1499 - 1520

HPV 61 NC 001694

Sequence No.	5'→ 3'	Locus in HPV 61
M6101	CTGCTACATCCCCCC	6803 – 6817
M6102	ACATCCCCCCCTGTATCTGA	6808 – 6827
M6103	CATCCCCCCCTGTATCTGAA	6809 – 6828
M6104	CCCCTGTATCTGAATATAAAGC	6815 – 6836
M6105	CTGAATATAAAGCCACAAGC	6824 – 6843
M6106	TAAAATACATTTAACCCCTGAAA	6903 – 6925
M6107	TAAGGCCTTGTTGGATGAC	6951 – 6969
M6108	TGTGGTACCACCACCCTCTACCAGTT	6981 – 7006
M6109	ATATAGGTTTTTGCAGTCCAGA	7017 – 7038
M6110	GGGTGCTGCTGCCCCGCCGCCC	7056 – 7077
M6111	CTATGCCAAGTTATCC	7089 – 7104
M6112	TGCACAGGATGACGCTGCAACGG	1038 – 1060
M6113	CCTTGGTGGACAGTGAATTAAGTCCC	1115 – 1140
M6114	GGACAGGACAGGGCTAGGAGAAGGCTG TTT	1168 – 1197
M6115	TGTTTGAGCAAGATAGTGGC	1193 – 1212
M6116	GGATGCGCAACATCAGGGGGGGGGGGG	1263 – 1288
M6117	GGCCGAGGCCACAGGTAACCAGGAAA	1335 – 1360
M6118	GGCAGACATATTAGAGGTGTTTAAGG	1380 – 1405
M6119	CTGTACAAATTCAAGGACCTATTTGG	1429 – 1454
M6120	CTAGCATTTGGGGAGCTGGTA	1456 – 1476

HPV 62 U12499

Sequence No.	5'→ 3'	Locus in HPV 62
M6201	CCGCCTCCACTGCTG	92 – 106
M6202	GCCTCCACTGCTGCAGCAGA	94 – 113
M6203	CTGCTGCAGCAGAATACACG	101 – 120
M6204	GCAGAATACACGGCTACCAA	109 – 128
M6205	CAGAATACACGGCTACCAAC	110 – 129
M6206	CAAAATACAGTTAACCCCCGAAA	189 – 211
M6207	CAAGGACCTTTTGGATGAC	237 – 255
M6208	GGTTTTACCTCCCCCTTCCACTAGTT	267 – 292
M6209	ATATCACTATTTCGAGTCTCGG	303 – 324
M6210	GGGGCTGCCTACCCGTCCC	342 – 360
M6211	GTATGCGCAAATGACA	372 – 387

HPV 66 NC 001695

Sequence No.	5' → 3'	Locus in HPV 66
M6601	CAGCTAAAAGCACAT	6680 – 6694
M6602	CAGCTAAAAGCACATTAACT	6680 – 6699
M6603	CTAAAAGCACATTAACTAAA	6683 – 6702
M6604	TTAACTAAATATGATGCCCG	6694 – 6713
M6605	CTAAATATGATGCCCGTGAA	6698 – 6717
M6606	TAAAATAACCTTAACTGCAGAAG	6777 – 6799
M6607	TAATACTTTATTAGACGAT	6825 – 6843
M6608	CTTATCCCCACCAGTTGCAACTAGCT	6855 – 6880
M6609	ATATAGGTATATTAAAAGCACA	6891 – 6912
M6610	GGAACAGCCCCCTGCAGAA	6930 – 6948
M6611	CCTGGCTAAATATAAG	6960 – 6975
M6612	AGCACATGCAGATGCACAGACG	1116 – 1137
M6613	GGTAGTCCCTTAAGTGATATTAGTAA	1165 – 1190
M6614	GCAAACTGTGTACCGAGAGGAAGTAA	1194 – 1219
M6615	AAGGCTAATATTATCAGAAGACAGCGGGTA	1224 – 1253
M6616	GAAACATCACAACAGGTAGAATACG	1276 – 1300
M6617	GAGCTCACAAAATGGAGGCTCGCAAA	1320 – 1345
M6618	ATCAAATATGGATATAGATACAAATA	1371 – 1396
M6619	CCAATTGCAGGAACTATTTAAAAGTA	1413 – 1438
M6620	CAAGGAAGATTACATTTTAAATTTAA	1447 - 1472
M6621	AGAAGTGTATGGAGTGCCAT	1473 – 1492

HPV 67 D21208

Sequence No.	5' → 3'	Locus in HPV 67
M6701	CTGAGGAAAAATCAG	6655 – 6669
M6702	GAGGAAAAATCAGAGGCTAC	6657 – 6676
M6703	ATCAGAGGCTACATACAAAAATG	6665 – 6687
M6704	AGGAAAAATCAGAGGCTACA	6658 - 6677
M6705	CTACATACAAAAATGAAAAC	6673 – 6692
M6706	CAAAATATCCCTTACTGCAAATG	6752 – 6774
M6707	TCCAGATATATTAGAGGAC	6800 – 6818
M6708	CCTTACACCACCTCCTTCAGGTAATT	6830 – 6855
M6709	ATATAGATTTGTTACCTCGCAG	6866 – 6887
M6710	AACATCCCCTCCAACAGCA	6905 – 6923
M6711	TCTTAAAAAGTACAGT	6935 – 6950
M6712	AGAGGAGGATGACCTAAACGCTG	1096 – 1118

M6713	CAGGCATGTGGTGGTAATAGTAATGG	1151 – 1176
M6714	GCCGCAAAACGCAGAGCATACGACATAG AA	1199 – 1228
M6715	GGCAAAATGGCGATATGCAGTGCAGT	1287 – 1312
M6715	GCAAGTAGTACGGGAAACAGTGTAGA	1331 – 1356
M6716	GTCAGGAACAAAGCATGCCATTGCAA	1380 – 1405
M6717	GCATGTAAATAATATAAAGGCAACG	1423 – 1447
M6718	GGAAGCATATGGGGTAACGTTTACAC	1465 – 1490

HPV 68 M73258

Sequence No.	5'→ 3'	Locus in HPV 68
M6801	CTACTACTGAATCAG	2653 – 2667
M6802	TGAATCAGCTGTACCAAATA	2660 – 2679
M6803	GAATCAGCTGTACCAAATAT	2661 – 2680
M6804	CAGCTGTACCAAATATTTATGA	2665 – 2686
M6805	ATATTTATGATCCTAATAAA	2677 – 2696
M6806	TCCTGCTATTTTGGATGAT	2804 – 2822
M6807	TACTATAACATTGTCCACTGATG	2756 – 2778
M6808	TGTTGCCCCTCCACCATCTGCTAGTC	2834 – 2859
M6809	ATACCGCTATCTGCAATCAGCA	2870 – 2891
M6810	AGACGCCCCTGCACCTACT	2909 – 2927
M6811	ATATGATGGCTTAAAC	2939 – 2954
M6812	GGCCCAAAGGGATGCACAAACAG	4990 – 5012
M6813	GCCCTTTAGCAAAGTCGCCATTACAG	5055 – 5080
M6814	GGTAACTGTAGCAACTAATA	5115 – 5134
M6815	GGAAAATGGCGACAGCATACGGGAGGA CTG	5163 – 5192
M6816	GACAGTGCTATAGATAGTGAAAACCA	5203 – 5228
M6817	CCTACTACGCAACTAAAAGTATTA	5242 – 5265
M6818	AAGCTGCAATGTTAACAGAATTTAAA	5285 – 5310

HPV 69 NC 002171

Sequence No.	5'→ 3'	Locus in HPV 69
M6901	TATTAGTACTGTATCTGCAC	6572 – 6591
M6902	CTGTATCTGCACAAT	6580 – 6594
M6903	CTGTATCTGCACAATCTGCA	6580 – 6599
M6904	TGCACAATCTGCATCTGCCA	6587 – 6606
M6905	CAATCTGCATCTGCCACTTTTA	6591 – 6612

M6906	CCACTTTTAAACCATCAGAT	6604 – 6623
M6907	TAAAATTACTCTTACCACTGATG	6683 – 6705
M6908	TTCTACTATTTTGGAAAAT	6731 – 6749
M6909	CCTTACCTTGCCTCCTACTGCTAGTT	6761 – 6786
M6910	ATATAGGTTTATTAAAAATTCA	6797 – 6818
M6911	CGATGCCCCTGCACAGCCC	6836 – 6854
M6912	AACACAAGCAAATAAGAAGGCAG	1101 – 1123
M6913	GAACAGCCCGTTGCAAGACATAACAA	1158 – 1183
M6914	CAGACGAAGTAAACAATTTACAGGC	1208 – 1232
M6915	GGAGAGCAGTGGACAGTGTTCCGGACAG CG	1238 – 1267
M6916	GGTAGATAAACACAATGAACAAAATG	1308 – 1333
M6917	TCAAGTGGATCTGTATCAGACA	1360 – 1381
M6918	GCACAGGCAAGTAGTGTAACCAAAA	1399 – 1423
M6919	GTAATGTAAAAGCAGCATTATTAA	1445 – 1468
M6920	CAGTATATGGTGTAAGTTATA	1481 – 1501

HPV 6 NC 000904

Sequence No.	5' → 3'	Locus in HPV 6
M0601	CATCCGTAACTACATCTTCC	6814 – 6833
M0602	ATCCGTAACTACATCTTCCA	6815 – 6834
M0603	CTACATCTTCCACATACACCAA	6823 – 6844
M0604	CATCTTCCACATACACCAAT	6826 – 6845
M0605	ATCTTCCACATACACCAATT	6827 – 6846
M0606	CCACATACACCAATTCTGAT	6832 – 6851
M0607	TAGCATTACATTGTCTGCTGAAG	6911 – 6933
M0608	TCCCTCTGTTTTGGAAGAC	6959 – 6977
M0609	GTTATCGCCTCCCCCAAATGGTACAT	6989 – 7014
M0610	CTATAGGTATGTGCAGTCACAG	7025 – 7046
M0611	GCCCACTCCTGAAAAGGAA	7064 – 7082
M0612	CTATAAGAACCTTAGT	7094 – 7109
M0613	GGCGGACACCCATTATGCGACTG	1045 – 1067
M0614	GTTAGTCCTATAAACACTATAGCCGA	1106 – 1131
M0615	CCACGATTGGACGCCATTAAACTTACAA GA	1154 – 1183
M0616	GGCTGTTTCAAACCAGGGAACTAACG	1206 – 1231
M0617	GGTAGAGAAACATGGCGTACCGGAAA	1279 – 1304
M0618	GGACACAGGAAGGGACATAGAGGGGG	1327 – 1352
M0619	CACAAACAGTGTACGGGAGCATGCAG	1378 – 1403

| M0620 | GCTAAAATGTAAAGATTTACGGGCAG | 1426 – 1451 |
| M0621 | GCTTTGGGCTGTCTTTTATAGATTTA | 1476 – 1501 |

HPV 70 NC 001711

Sequence No.	5'→ 3'	Locus in HPV 70
M7001	TGTCTGCCTGCACCGAAACG	6614 – 6633
M7002	CTGCACCGAAACGGC	6621 – 6635
M7003	GAAACGGCCATACCTGCTGT	6628 – 6647
M7004	CGAAACGGCCATACCTGCTG	6627 – 6646
M7005	CGGCCATACCTGCTGTATATAG	6632 – 6653
M7006	CTGTATATAGCCCTACAAAG	6644 – 6663
M7007	TACTATCACATTAACTGCTGACG	6723 – 6745
M7008	TCCTGCAATTTTGGACAAT	6771 – 6789
M7009	AGTTACCCCTCCACCATCTGCAAGCT	6801 – 6826
M7010	GTATAGGTATTTACAATCAGCA	6837 – 6858
M7011	GGATGCTCCTACACCTGAA	6876 – 6894
M7012	CTATGACGATTTAAAA	6906 – 6921
M7013	GGCCCAAAGGGATGCACAATCAG	1149 – 1171
M7014	GCAATCTAAATAAAAGTCCTTGT	1202 – 1224
M7015	GTACATAGGGAACAAAGGGTAACAC	1240 – 1264
M7016	GGTAAACATATGCAATAAACAGG	1278 – 1300
M7017	ACAAACGTGTATTCAGTACCAGACAGCGGC	1306 – 1335
M7018	GTAGTAAATAATACAAATGGGGAAGA	1378 – 1403
M7019	GGAGTGCAGTAGTGTAGACAGTGCTA	1446 – 1471
M7020	TCCACAGTCACCTACTGCACAGCTAA	1491 – 1516
M7021	GCTAATAACCAAAAAGCCATACTAC	1531 – 1555
M7022	CACACATATGGATTAGCATTTAACGA	1570 – 1595

HPV 72 X94164

Sequence No.	5'→ 3'	Locus in HPV 72
M7201	ATCTGTTGGTTTAATGAGCT	6759 – 6778
M7202	TTTGTGACAGTTGTAGATAC	6780 – 6799
M7203	CTGCCACAGCGTCCT	6829 - 6843
M7204	ACAGCGTCCTCTGTATCAGA	6834 – 6853
M7205	CCACAGCGTCCTCTGTATCA	6832 – 6851
M7206	AGCGTCCTCTGTATCAGAATAT	6836 – 6857
M7207	CAGAATATACAGCTTCTAAT	6850 – 6869

M7208	TAAAATTCACTTAACTCCTGAAA	6929 – 6951
M7209	TAAGGCCTTATTGGATGAC	6977 – 6995
M7210	TGTGGTGCCTCCTCCTTCTACCAGTT	7007 – 7032
M7211	CTATAGGTTTTTGCAGTCTCGT	7043 - 7064
M7212	GGGGGCTGCCACCCCTCCTCCT	7082 – 7103
M7213	ATATGCTAACTTATCC	7115 – 7130

HPV 74 U40822

Sequence No.	5' → 3'	Locus in HPV 74
M7401	CCTACCTCACAATCG	1686 – 1700
M7402	CTCACAATCGCCTTCTGCTA	1691 – 1710
M7403	ACCTCACAATCGCCTTCTGC	1689 – 1708
M7404	CAATCGCCTTCTGCTACATATA	1695 – 1716
M7405	ACAATCGCCTTCTGCTACATAT	1694 - 1715
M7406	CTACATATAATAGTTCAGAC	1708 – 1727
M7407	TAGTATTAAGTTAACTGCTGAGG	1787 – 1809
M7408	TCCTACAGTTTTAGAAGAG	1835 – 1853
M7409	GCTAACGCCTCCCCCCAATGGTACTT	1865 – 1890
M7410	CTACAGATATGTGCAGTCCCAG	1901 – 1922
M7411	ACCTACGCCTGATAAAGCA	1940 – 1958
M7412	CTATGCAAATTTAAGT	1970 – 1985

HPV 82 AB027021

Sequence No.	5' → 3'	Locus in HPV 82
M8201	TGCTGTTACTCCATC	6608 – 6622
M8202	TGCTGTTACTCCATCTGTTG	6608 – 6627
M8203	ACTCCATCTGTTGCACAAAC	6615 – 6634
M8204	AAACATTTACTCCAGCAAAC	6631 – 6650
M8205	TAAAATCACTTTAACTACTGAAA	6710 – 6732
M8206	TTCTACAATTTTAGAACAG	6758 – 6776
M8207	ATTAACATTGCCCCCCTCCGCTAGTT	6788 – 6813
M8208	CTATCGATTTGTAAAAAATGCA	6824 – 6845
M8209	GGACAGTCCTCCACAGGCT	6863 – 6881
M8210	AACACAGGCACACAAAGAGGCTG	1094 – 1116
M8211	GCAGCCCATTAAAAGACATTACAAA	1156 – 1180
M8212	GTCAGCAACAACCAAAACAGGCAAACCTTC	1201 – 1230
M8213	GGAGATTACTGGACAGTTATCCGGACA	1243 – 1269

M8214 CCTTACAGGTAGATGGGCAAAATGAC   1309 – 1334
M8215 GAGCAGCGACAGAAGTACAGAGATAG   1367 – 1392
M8216 GCTACCAATGTAGGACTAAACAGTA   1413 – 1437
M8217 GTAGCAATGCAAAAGCAATGTTTATG   1456 – 1481
M8218 GGTGTTAGTTATAATGAGTTGGTAAG   1503 – 1528

HPV CP8061 U12479

Sequence No.	5' → 3'	Locus in HPV CP8061
M806101	TCTGTGCTACCAAAACTGTT	86 – 105
M806102	CTACCAAAACTGTTG	92 – 106
M806103	ACCAAAACTGTTGAGTCTAC	94 – 113
M806104	AACTGTTGAGTCTACATATAAA	99 – 120
M806105	GTTGAGTCTACATATAAAGC	103 – 122
M806106	CTACATATAAAGCCTCTAGT	110 – 129
M806107	TGTTATTAATTTAACAGCTGAAA	189 – 211
M806108	TGCTACATTACTGGAGGAC	237 – 255
M806109	GTTCTTACCACCTCCTACTG	267 – 286
M806110	CTACCGCTTTTTACAGTCTCAG	303 – 324
M806111	AAACAGTCCTCCTCCTGCAGAA	342 – 363
M806112	CTATGCAGATCTTACA	375 – 390

HPV CP8034 U12480

Sequence No.	5' → 3'	Locus in HPV CP8034
M830401	CAGCTACATCTGCTG	92 – 106
M830402	GCTACATCTGCTGCTGCAGA	94 – 113
M830403	ACATCTGCTGCTGCAGAATACA	97 – 118
M830404	TGCTGCAGAATACAAGGCCT	105 – 124
M830405	GCTGCAGAATACAAGGCCTC	106 – 125
M830406	CAGAATACAAGGCCTCTAAC	110 – 129
M830407	TAAAATACAGTTAACACCAGAAA	189 - 211
M830408	CAAGGCACTGTTGGATGAT	237 – 255
M830409	TGTGTTGCCACCTCCTTCCACCAGTT	267 – 292
M830410	ATATCGCTTTTTACAGTCTCGG	303 – 324
M830411	GGGTGCTGCTGCCCCTGCGCCC	342 – 363
M830412	TTATGCCGACATGTCA	375 – 390

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HPV L1AE5 AF039910

Sequence No.	5' → 3'	Locus in HPV L1AE5
MAE501	ATCTACTGCAACTACTAATC	69 – 88
MAE502	CTGCAACTACTAATC	74 – 88
MAE503	CTGCAACTACTAATCCAGTT	74 – 93
MAE504	ACTACTAATCCAGTTCCATCTA	79 – 100
MAE505	CTAATCCAGTTCCATCTATA	83 – 102
MAE506	CTATATATGAACCTTCTAAA	98 – 117
MAE507	TAAAATTACACTTACTACTGATG	177 – 199
MAE508	TCCTACTATTTTAGATAGT	225 – 243
MAE509	TGTTAGTCCTCCCCATCTGCTAGCT	255 – 280
MAE510	ATATAGGTTTTTACAGTCATCT	291 – 312
MAE511	GGATGTGGTTGTTCCACAA	330 – 348

HPV MM4 U12488

Sequence No.	5' → 3'	Locus in HPV MM4
MM401	CTGCTGTTACTCAATCTGTT	92 – 111
MM402	TGCTGTTACTCAATC	93 – 107
MM403	GTTACTCAATCTGTTGCACA	97 – 116
MM404	TGCACAAACATTTACTCCAG	111 – 130
MM405	TTACTCAATCTGTTGCACAAAC	98 – 119
MM406	AAACATTTACTCCAGCAAAC	116 – 135
MM407	TAAAATCACTTTAACTACTGAAA	195 – 217
MM408	TTCTACAATTTTAGAACAG	243 – 261
MM409	ATTAACCTTGCCCCCCTCAGCTAGTT	273 – 298
MM410	CTATCGATTTGTAAAAAATGCA	309 – 330
MM411	GGACAGTCCTCCACAGGCT	348 – 366

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HPV MM7 U12489

Sequence No.	5' → 3'	Locus in HPV MM7
MM701	TGCTGCTACACAGGC	93 – 107
MM702	GCTGCTACACAGGCTAATGA	94 – 113
MM703	TGCTACACAGGCTAATGAAT	96 – 115
MM704	CTACACAGGCTAATGAATACAC	98 – 119
MM705	ATGAATACACAGCCTCTAAC	110 – 129
MM706	CAAAATACATCTTACCCCTGAAA	189 – 211

MM707 TGAACATTTATTGGATGAG	237 – 255
MM708 CGTGTTACCACCTCCTTCCACCAGCC	267 – 292
MM709 CTATCGCTATCTGCAGTCCCGT	303 – 324
MM710 GGGTCCTTCCGCCCCTGCCCCT	342 – 363
MM711 TTATGATGGCCTTGTA	375 – 390

HPV MM8 U12490

Sequence No.	5'→ 3'	Locus in HPV MM8
MM801	TGCTACCAACACCGA	93 –107
MM802	CTACCAACACCGAATCAGAA	95 –114
MM803	CCAACACCGAATCAGAATATAA	98 –119
MM804	CAGAATATAAACCTACCAAT	110 – 129
MM805	TAAGGTCCGTCTGACTCCAGAGG	189 – 211
MM806	TGACTCCTTATTAGATGAG	237 – 255
MM807	TGTTGTGCCCCCTCCCTCCACAAGTT	267 – 292
MM808	CTATAGGTACTTGCAGTCTCGC	303 – 324
MM809	GGGGGCCGCCGCCGCCAAGCCT	342 – 363
MM810	TTATGCTGGCATGTCC	375 – 390

wherein the sequence of said first oligonucleotide is selected from one of the sequence group corresponding to said first subtype of human papilloma virus and complementary sequences thereof, and the sequence of said second oligonucleotide is selected from one of the sequence group corresponding to said second subtype of human papilloma virus and complementary sequences thereof.

5. The detector according to claim 4, wherein said detector is an oligonucleotide chip.

6. A method for simultaneously detecting and identifying subtypes of human papilloma viruses contained in a sample, comprising steps of:

providing a first oligonucleotide and a second oligonucleotide for respectively hybridizing with a first and a second subtypes of human papilloma viruses;

hybridizing deoxyribonucleic acid (DNA) contained in said sample with said first and second oligonucleotides; and

removing nonhybridized DNA,

thereby said subtypes of human papilloma viruses contained in said sample are detected and identified.

7. The method according to claim 6, wherein said DNA contained in said sample is the product of polymerase chain reaction (PCR).

8. The method according to claim 6, wherein said DNA contained in said sample has signaling substances labeled thereon.

9. The method according to claim 8, wherein said signaling substance is biotin.

10. The method according to claim 9 further comprising a step of performing a reaction of biotin and avidin-alkalinephosphatase.

11. The method according to claim 8, wherein said signaling substances are fluorescent substances.

12. The method according to claim 11, wherein said fluorescent substance is Cyanine 5.

13. A method for detecting a subtype of human papilloma viruses contained in a sample, comprising steps of:

providing an oligonucleotide complementary to a sequence specific to said subtype of human papilloma viruses;

hybridizing said oligonucleotide with deoxyribonucleic acid (DNA) contained in said sample;

removing non-hybridized DNA contained in said sample; and

detecting hybridized DNA to show whether said subtype of human papilloma viruses contained in said sample,

wherein said sequence specific to said subtype of human papilloma viruses is selected from following:

HPV subtype	Accession number/bp	loci /bp
HPV 11	NC 001525/7931	6727 – 7135/409
		1044 – 1509/466
HPV 16	NC 001526/7904	6602 – 7013/412
		1089 – 1538/450
HPV 18	NC 001357/7857	6578 – 6992/415
		1135 – 1609/475
HPV 26	NC 001583/7855	6553 – 6967/415
		1093 – 1522/430
HPV 31	NC 001527/7912	6520 – 6931/412
		1083 – 1476/394
HPV 32	NC 001586/7961	6837 – 7245/409
		1032 – 1536/505
HPV 33	NC 001528/7909	6559 – 6967/409
		1100 – 1532/433
HPV 35	NC 001529/7851	6542 – 6953/412
		1089 – 1497/409
HPV 37	NC 001687/7421	6711 – 7125/415
HPV 39	NC 001535/7833	6605 – 7019/415
		1149 – 1593/445
HPV 42	NC 001534/7917	6802–7210/409
		1085–1485/401
HPV 43	U12504/455	21–435/415
HPV 44	NC 001689/7833	6647 – 7061/415
		1038 – 1491/454
HPV 45	NC 001590/7858	6582 – 6996/415
		1136 – 1567/432
HPV 51	NC 001533/7808	6486 – 6897/412
		1092 – 1506/415
HPV 52	NC 001592/7942	6623 – 7031/409
		1085 – 1526/442
HPV 53	NC 001593/7856	6614 – 7022/409
HPV 54	NC 001676/7759	6561 – 6972/412
		1013 – 1484/472
HPV 56	NC 001594/7844	6559 – 6967/409

HPV 58	NC 001443/7824	6608 – 7016/409
		1104 – 1536/433
HPV 59	NC 001635/7896	6571 – 6985/415
		1093 – 1528/436
HPV 61	NC 001694/7989	6732 – 7146/415
		1005 – 1515/511
HPV 62	U12499/449	21 – 429/409
HPV 66	NC 001695/7824	6609 – 7017/409
		1023 – 1545/523
HPV 67	D21208/7801	6584 – 6992/409
		1096 – 1504/409
HPV 68	M73258/6042	2582 – 2996/415
		4990 – 5350/361
HPV 69	NC 002171/7700	6509 – 6923/415
		1101 – 1518/418
HPV 6	NC 000904/8012	6743 – 7151/409
		1045 – 1510/466
HPV 70	NC 001711/7905	6549 – 6963/415
		1149 – 1608/460
HPV 72	X94164/7988	6758 – 7172/415
HPV 74	U40822/3891	1613 – 2027/415
HPV 82	AB027021/7871	6536 – 6950/415
		1094 – 1532/439
HPV CP8061	U12479/452	21 – 432/412
HPV CP8304	U12480/452	21 – 432/412
HPV L1AE5	AF039910/364	11 – 360/350
HPV MM4	U12488/455	21 – 435/415
HPV MM7	U12489/452	21 – 432/412
HPV MM8	U12490/452	21 – 432/412